

**Report Outline and Reviewer Assignments**  
**for**  
**Director's CD-1 Review of NOvA**  
**February 28-March 2, 2006**

Executive Summary	<u>Ed Temple</u>
1.0 Introduction	<u>Dean Hoffer</u>
2.0 Science	<u>Heidi Schellman</u> , and All
3.0 Site and Building (WBS 1/2.1)	<u>Karen Hellman</u> , Elaine McCluskey
4.0 Commodities – Scintillator/Fiber/PVC (WBS 1/2.2, 1/2.3 & 1/2.4)	<u>Linda Stutte</u> , Joe Ingrassia
5.0 Extrusion Module Production (WBS 1/2.5)	<u>Dmitri Denisov</u> , Heidi Schellman
6.0 Electronics, Trigger DAQ (WBS 1/2.6 & 1/2.7)	<u>Jonathan Lewis</u> , Erik Gottschalk
7.0 Far and Near Detector Assembly (WBS 1/2.8 & 2.9)	<u>Richard Boyce</u> , Charlie Cooper
8.0 Project Management (WBS 1.9 & 2.10)	<u>Mike Lindgren</u> , Ed Temple
9.0 Cost and Schedule	<u>Jeff Sims</u> , Dean Hoffer,
10.0 Charge Questions	
<b><u>TECHNICAL</u></b>	
10.1 Are the requirements that form the basis for the design and engineering phase of the project clearly documented?	<u>Heidi Schellman</u>
10.2 Does the conceptual design satisfy the performance requirements?	
10.3 Has a Conceptual Design Report (CDR) been developed that includes a clear and concise description of the alternatives analyzed, the basis for the alternative selected, how the alternative meets the approved mission need?	<u>Mike Lindgren</u>
10.4 Has the Project employed value management as early as possible in the project development and design process so recommendations can be included in the planning and implemented without delaying the progress of the project or causing significant rework of completed designs?	
10.5 Has the Project identified specific standards which include codes, standards, regulations, and needed discipline (electrical, mechanical, nuclear, fire, radiation control, etc.) requirements to procure, fabricate, construct, inspect, and test the components, subsystems, and systems?	<u>Elaine McCluskey</u>
10.6 Can the conceptual design be built? Does the design meet the technical specifications? Is it a reasonable design?	<u>Richard Boyce/ All</u>

<u>COST</u>	
10.7 Does the conceptual design report and supporting documentation adequately justify the stated cost range and project duration?	<u>Jeff Sims/ All</u>
10.8 Has the project developed a life-cycle cost estimate that includes costs for research and development, construction, operations and decommissioning?	
10.9 Do the cost estimates for each WBS (or cost) element have a sound documented basis and are they reasonable?	
10.10 Does an obligation profile exist?	<u>Mike Lindgren</u>
10.11 Has the project established a realistic cost estimate for the work associated with performing Preliminary Design, Final Design and Value Management activities to request an appropriate level of PED (Project Engineering and Design) Funds?	<u>Jeff Sims/ All</u>
<u>SCHEDULE</u>	
10.12 Does the Project’s Work Breakdown Structure (WBS) define the total scope of the project as a product-oriented family tree composed of hardware, software, services, data, facilities and other components?	<u>Dean Hoffer/ All</u>
10.13 Is a schedule developed and resource loaded?	
10.14 Are the activity durations reasonable for the assumed resources?	
10.15 Is the schedule duration feasible for the resources assigned to accomplish the tasks?	
10.16 Does the schedule contain appropriate levels of milestones, sufficient quantity of milestones for tracking progress and do they appear to be achievable?	
10.17 Does the schedule include activities for design reviews, which include assessment of the designs readiness for procuring prototypes and preproduction materials?	
10.18 Has the activities associated with the Preliminary Design, Final Design and Value Management activities been appropriated identified in the schedule so they can be properly tracked if PED funds are used?	
<u>MANAGEMENT</u>	
10.19 Is there an appropriate management organization structure in place with the responsibilities defined and documented for the scope of work?	<u>Mike Lindgren</u>
10.20 Does the proposed project team have adequate management experience, design skills, and laboratory support to produce a credible technical, cost, and schedule baseline?	<u>Mike Lindgren/ Ed Temple</u>
10.21 Are ES&H aspects being properly addressed and are future plans sufficient given the projects current stage of development?	<u>Elaine McCluskey/ Richard Boyce</u>
10.22 Is the documentation required by DOE O 413.3 in order and ready for Approval of CD-1?	<u>Mike Lindgren</u>
10.23 Are there adequate staffing resources available or planned for this effort?	
10.24 Is there a funding plan available or proposed to meet the resource requirements to realize the project?	
10.25 Has Risk Management been performed which includes risks assessments on each potential design alternative as a factor in selecting which alternative is to be pursued?	

- Note underlined names are the primary writer.